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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/791,740	03/04/2004	Jin-Hwa Heo	239/167 DIV	3615	
7590 06/19/2006			EXAMINER		
LEE & STERBA, P.C.			DEO, DUY VU NGUYEN		
SUITE 2000 1101 WILSON	BOULEVARD		ART UNIT	PAPER NUMBER	
ARLINGTON, VA 22209			1765		
			DATE MAILED: 06/19/2006	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

				1		
		Application No.	Applicant(s)	——— <del>/</del>		
		10/791,740	HEO ET AL.			
Office Action	n Summary	Examiner	Art Unit			
		DuyVu n. Deo	1765			
	E of this communication a		vith the correspondence addres	ss		
Period for Reply						
WHICHEVER IS LONGE  - Extensions of time may be availe after SIX (6) MONTHS from the  - If NO period for reply is specified  - Failure to reply within the set or of	R, FROM THE MAILING tible under the provisions of 37 CFR mailing date of this communication. above, the maximum statutory per extended period for reply will, by stater than three months after the markets.	DATE OF THIS COMMUN 1.136(a). In no event, however, may a	reply be timely filed  NTHS from the mailing date of this commu. BANDONED (35 U.S.C. § 133).			
Status						
1)⊠ Responsive to com	ımunication(s) filed on 14	1 April 2006				
2a) ☐ This action is <b>FINA</b>	· · · · <u>_</u> _	his action is non-final.				
<u> </u>	<i>,</i> —		tters, prosecution as to the me	erits is		
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-22</u> is/ar	e pending in the applicati	on.				
		Irawn from consideration.				
5)⊠ Claim(s) <u>5-11</u> is/ar	e allowed.					
6)⊠ Claim(s) <u>1-4 and 1</u>	2-22 is/are rejected.					
7) Claim(s) is/a	are objected to.					
8) Claim(s) are	subject to restriction and	d/or election requirement.				
Application Papers						
9) ☐ The specification is	objected to by the Exam	iner.				
10) The drawing(s) filed	l on is/are: a)∏ a	accepted or b)  objected to	by the Examiner.			
Applicant may not re	quest that any objection to t	he drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).			
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	g(s) is objected to. See 37 CFR 1	* *		
11) The oath or declara	tion is objected to by the	Examiner. Note the attache	d Office Action or form PTO-1	152.		
Priority under 35 U.S.C. § 1	19					
12) Acknowledgment is a) All b) Some		ign priority under 35 U.S.C.	§ 119(a)-(d) or (f).			
1. Certified cop	ies of the priority docume	ents have been received.				
	ies of the priority docume	ents have been received in A	Application No			
	·	•	n received in this National Stag	ge		
	om the International Bur	• • • • • • • • • • • • • • • • • • • •				
" See the attached de	tailed Office action for a l	ist of the certified copies no	received.			
Attachment(s)						
1) Notice of References Cited (F			Summary (PTO-413)			
	nt Drawing Review (PTO-948) nent(s) (PTO-1449 or PTO/SB/		(s)/Mail Date Informal Patent Application (PTO-152	2)		
Paper No(s)/Mail Date		6)  Other:				

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## Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2. Claims 1-4, 12-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not clear wherein the specification teaching the limitations "the upper region of the first trench substantially corresponding to the upper region of the second trench and the lower region of the first trench substantially corresponding to the lower region of the second trench and a material filling the lower region of the first trench being different from a material filling the lower region of the second trench."
- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-4, 12-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation in the independent claim 1, "the upper region of the first trench substantially corresponding to the upper region of the second trench and the lower region of the first trench substantially corresponding to the lower region of the second trench" is vague. The specification doesn't define or describe what "substantially corresponding" means.

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## Allowable Subject Matter

5. Claims 5-11 remain allowed.

6. Claims 1-4, 12-22 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. Applied prior art, Witek, describes the material filling the lower region of the first and second trench is the same (col. 7, line 12-45).

## Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DuyVu n. Deo whose telephone number is 571-272-1462. The examiner can normally be reached on 6 am -2:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner Duy-Vu N Deo 6/15/06

PV